Federal Enterprise Architecture
Business Reference Model (BRM)

Business Reference Model Version 1.0

Agency Briefing

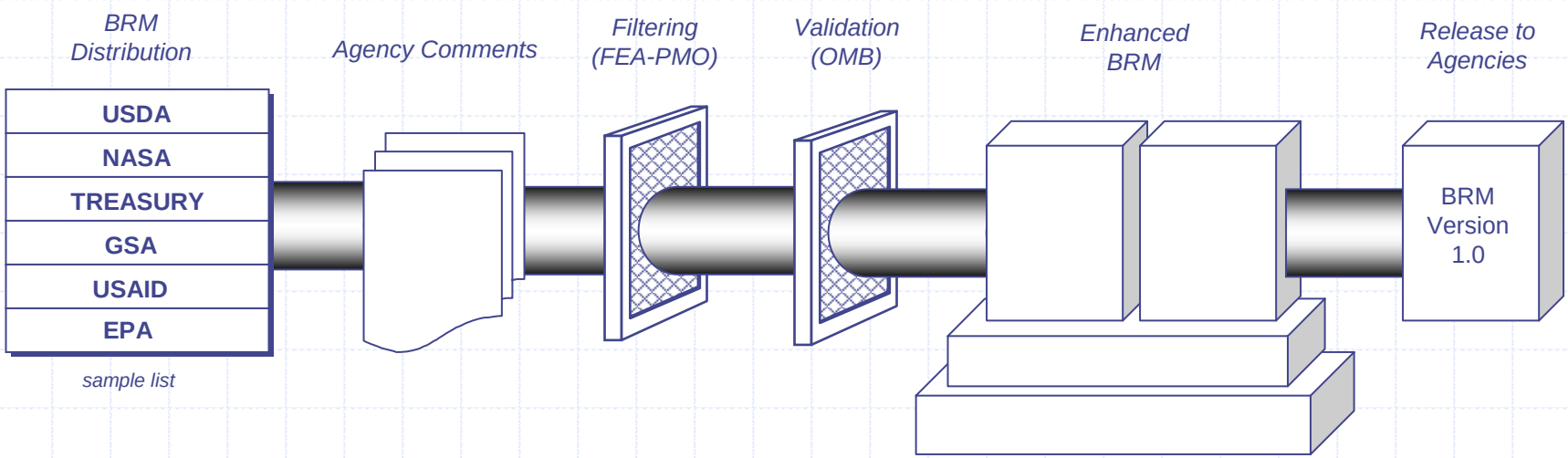
July 30, 2002

Table of Contents:

- Summary of Changes
- Using the Business Reference Model
- Conceptual Examples
- Next Steps

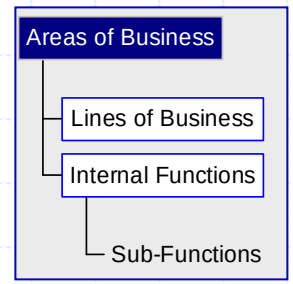
The BRM has been vetted across cabinet and lower-level civilian agencies to validate the proposed government-wide terminology

BRM VALIDATION AND ENHANCEMENT PROCESS



☑ Task Completed

The draft Business Reference Model was released to civilian agencies on April 25, 2002



Federal Enterprise Architecture Business Reference Model

Areas of Business

Lines of Business

Internal Functions

Program Admin

- Asset Management
- Defense & Nat'l Security Ops
- Diplomacy & Foreign Relations
- Disaster Management
- Domestic Economy
- Energy Management
- Grants/Loans/Awards
- Insurance
- Permits/Licensing
- Social Services
- Education
- Recreation & National Resources
- R&D & Science

Compliance

DRAFT

- Consumer Safety
- Environment Management
- Labor
- Law Enforcement
- Other Regulatory Compliance
- Tax Collection
- Trade (Import/Export)
- Transportation
- Legal

Support Delivery of Services

- Legislative Management
- Information Management
- Internal Controls and Monitoring
- Regulatory Creation

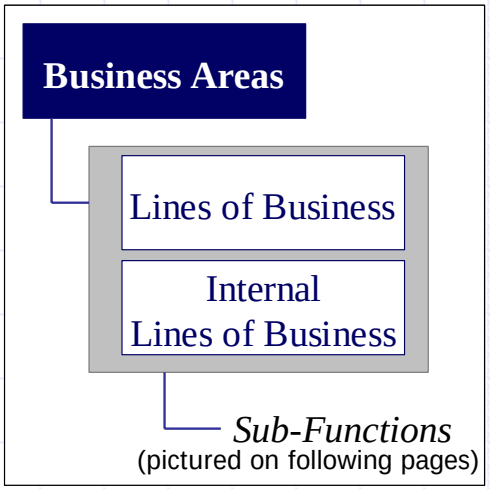
Internal Operations / Infrastructure

HR – Finance – Travel – Supply Chain Management (Procurement/Inventory Cntl/Logistics) – Admin

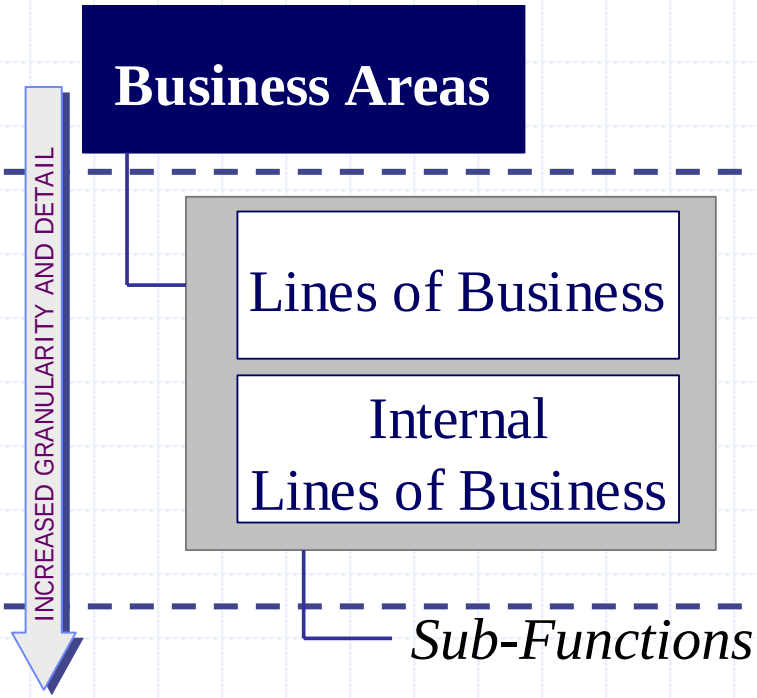
Agency comments on the BRM were received throughout the month of May

- Comments were logged according to their area of focus
  - BRM comments
  - Agency mapping comments
  - Exhibit 300 mapping comments
- All comments were carefully analyzed and the model was revised as appropriate
- A comprehensive “Comment Response Document” has been developed that summarizes the comments received and their responses

The revised Federal Enterprise Architecture (FEA) Business Reference Model (BRM)



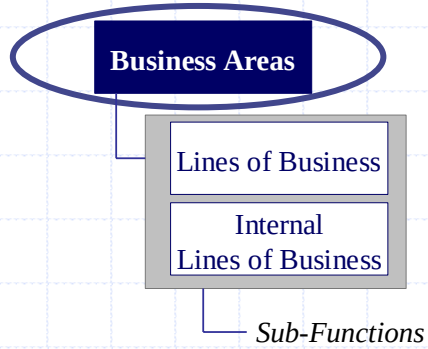
The revised BRM retains the same three-tiered structure, although significant changes were made at each level



Three Business Areas (**formerly four)** provide a high-level view of the types of operations the Federal Government performs.

The three Business Areas decompose into two sub-areas and **35 Lines of Business** and **Internal Lines of Business (formerly 31)**. These Lines of Business describe more specifically the services and products the Government provides to its stakeholders, while the Internal Lines of Business describe the inter- and intra-Agency back office and support activities that enable the Government to operate.

There are **137 Sub-Functions (formerly 132)** which form the final level of decomposition within the FEA BRM and communicate the specific activities that Federal Agencies perform within each Line of Business and Internal Function.

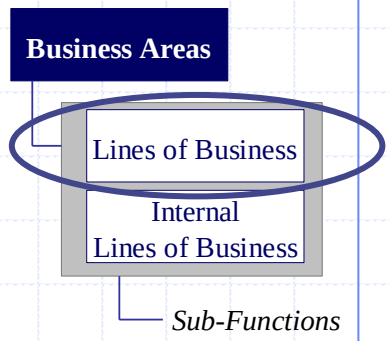


The following changes were made at the Business Area level as a result of agency feedback

- Combined **Program Administration** and **Compliance** into **Services to Citizens**
  - Highlights the government's citizen-focused delivery of services
  - Avoids confusion where Lines of Business contain aspects of both Compliance and Program Administration (e.g., Transportation, Workforce Management, Environmental Management)

  Note: The "Compliance-focused" versus "Program Admin-focused" lines of business can still be identified in the new model and in EAMS

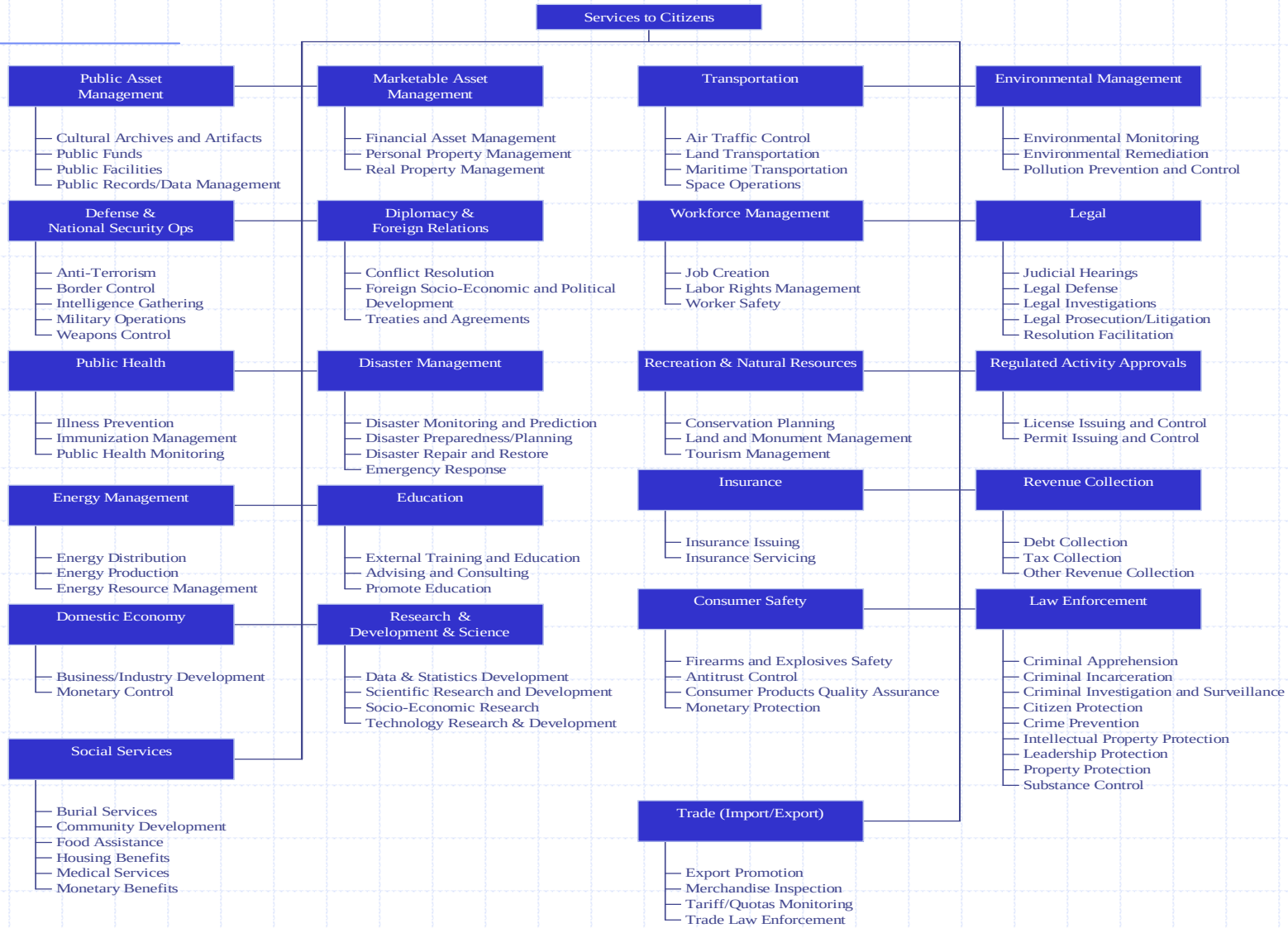
- Created two sub-areas within **Internal Operations / Infrastructure**
  - Addresses the distinction between *inter-agency* and *intra-agency* back-office operations

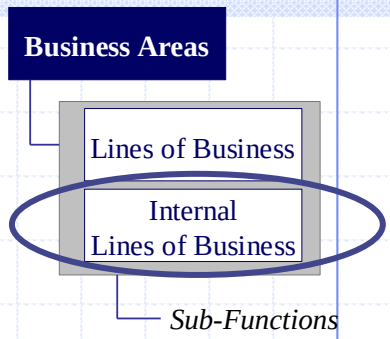


The following changes were made in the "Services to Citizens" Business Area as a result of agency feedback

- Reworked sub-functions to ensure a consistent level of granularity
- Split **Asset Management** into two new Lines of Business:
  - **Public Asset Management** with the following Sub-Functions: *Cultural Archives and Artifacts, Public Funds, Public Facilities,* and *Public Records/Data Management.*
  - **Marketable Asset Management** with the following Sub-Functions: *Financial Assets, Personal Property,* and *Real Property*.
- Renamed **Grants/Awards/Loans** to **Federal Financial Assistance** and moved to Support Delivery of Services
- Renamed **Labor** to **Workforce Management**
- Renamed **Permits & Licenses** to **Regulated Activity Approval**
- Added **Revenue Collection** Line of Business with the following Sub-Functions: *Tax Collection, Debt Collection*, and *Other Revenue Collection*
- Added **Public Health** Line of Business with the following Sub-Functions: *Illness Prevention, Public Health Monitoring,* and *Immunization Management*

Services to Citizens

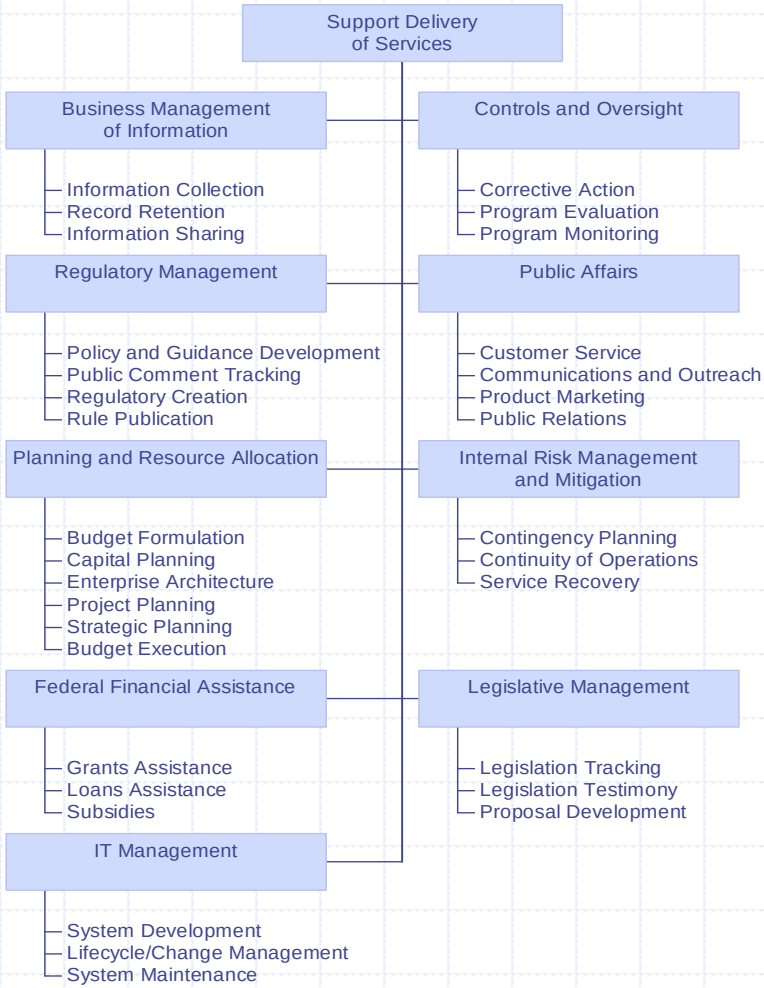


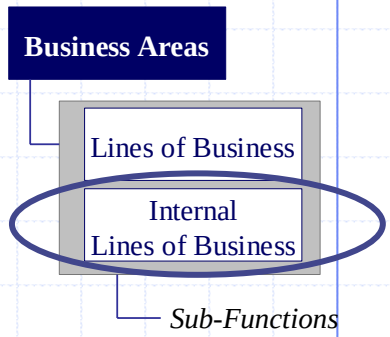


The following changes were made to the "Support Delivery of Services" Business Area as a result of agency feedback

- Reworked sub-functions to ensure a consistent level of granularity
- Renamed **Information Management** to **Business Management of Information** and reworked Sub-Functions
- Changed **Internal Controls and Monitoring** to **Controls and Oversight** to include internal and external monitoring and oversight
- Added **Planning and Resource Allocation** with the following sub-functions: *Budget Formulation, Budget Execution, Capital Planning, Enterprise Architecture, Project Planning,* and *Strategic Planning*
- Added **Public Affairs** with the following sub-functions: *Communications and Outreach, Customer Service, Product Marketing,* and *Public Relations*
- Added **Internal Risk Management and Mitigation** with the following sub-functions: *Contingency Planning, Continuity of Operations,* and *Service Recovery*

Support Delivery of Services





The following changes were made to the "Internal Operations/Infrastructure" Business Area

- Split "Internal Operations/Infrastructure" to address the difference between **Inter-Agency** and **Intra-Agency Operations**
  - The two sub-areas include identical functions and sub-functions
- Modified **Supply Chain Management** to address both *Goods* and *Services Acquisition*
- Modified **Human Resources** and added the following new sub-functions: *Advancement and Awards, Benefits Management, Labor Management,* and *Security Clearance Management*
- Aligned **Financial Management** with Joint Financial Management Improvement Program (JFMIP) requirements

Internal Operations/Infrastructure

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The Business Reference Model will provide OMB and the Agencies with an invaluable tool for improving the business of government from a cross-Agency perspective

OMB

- Where is the government investing money on redundant capabilities?
- What Agencies share common business functions, processes, and activities?
- What budget requests support duplicative business functions, information systems, or other capital assets?
- How can we monitor performance across Agencies and integrate performance measurement with the budget process?

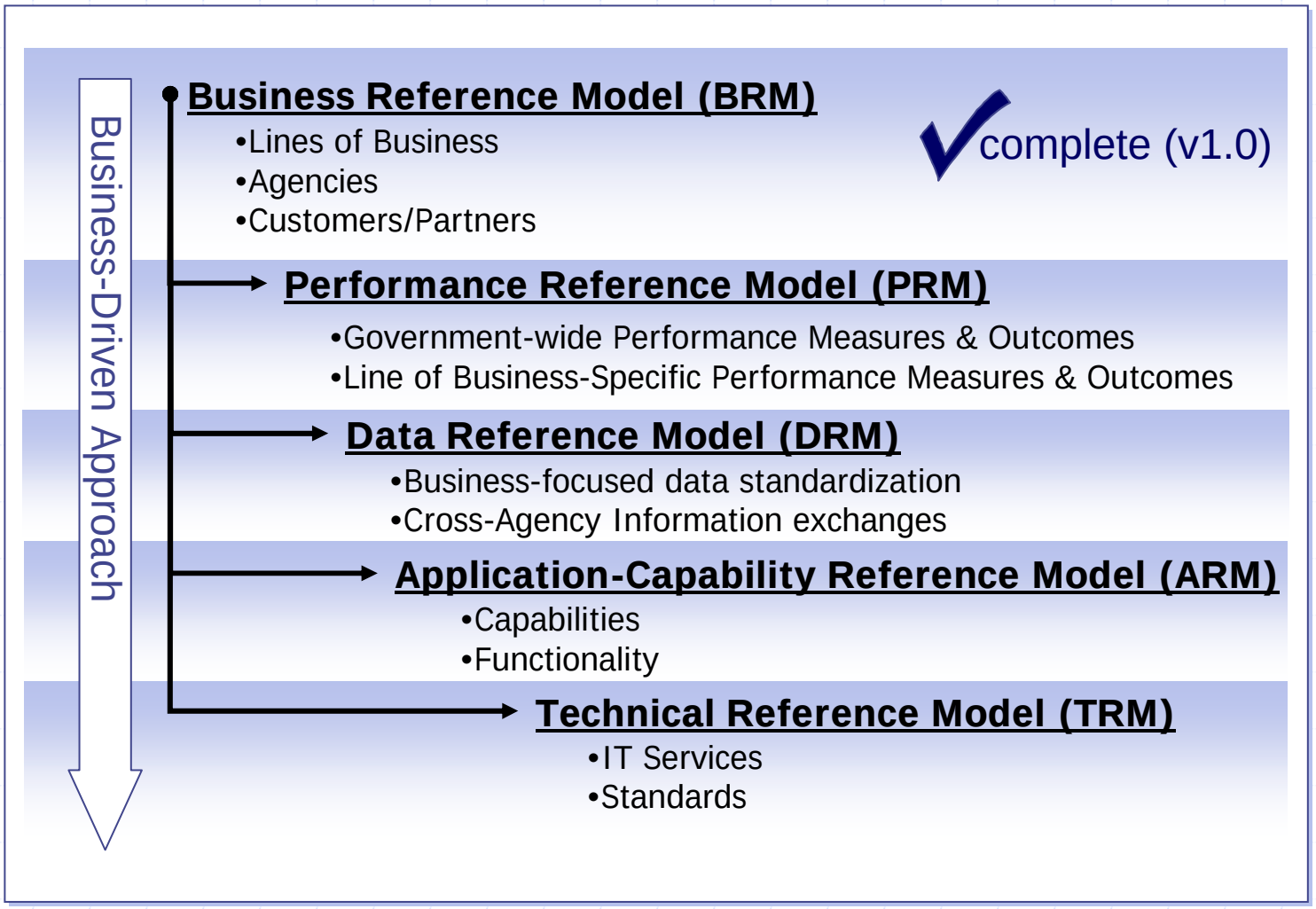
Agencies

- How can we save time and money by leveraging reusable business processes, data, and IT-components in other agencies?
- Can OMB provide any guidance on where to begin in the development of our own business architecture?
- How can we ensure that our proposed investments are not duplicative with other agencies' prior to developing business cases and submitting them to OMB?

In the Capital Asset Plans that are submitted to OMB for FY 2004, agencies are required to align their major IT investments to the Business Reference Model

- Section 300, II.A.1 requires that Agencies:
  - Identify the Lines of Business and Sub-Functions within the Federal Enterprise Architecture Business Reference Model that will be supported by this initiative (Question B)
  - Briefly describe how this initiative supports the identified Lines of Business and Sub-Functions of the Federal Business Architecture (Question C)

Additional reference models are being created using the BRM as a common starting point, further expanding the value proposition of the model



Other models build upon the BRM to define desired goals for the Government's business lines and determine how to best allocate resources to meet those goals

DESIRED OUTCOMES

OUTCOMES
- Citizen Service
- Mission Performance
- Internal efficiency

common measures across agencies and programs

The Performance Reference Model (PRM)

BUSINESS NEEDS

The Business Reference Model (BRM)

RESOURCE ALLOCATION

Information Technology	Human Capital	Other Capital Assets
Applications **Technology** **Data**	**Workforce**	**Equipment** **Fleet** **Facilities**

Resource reference models:
- Application
- Facilities
- Workforce
- Etc.

Most importantly, the FEA provides the missing link between resource allocation decisions (inputs) and measurable benefits to the citizen (outcomes)

AS-IS

OUTCOMES

•Separate Performance Measures for each Agency and each Program

Agency A
Program A
Agency F
Agency B
Agency E
Program D
???
Agency C
Agency H
Agency I
Program F
Agency J
Program B
Agency G
Agency K
Agency D
Program C
Program E

Applications
Infrastructure
Facilities
Fleet
???
Outsourcing
Workforce
Technology
Human Capital
Equipment

$$ INPUTS $$

Performance Measurement Model

Enabling Business Model

Resource Allocation Model

TO-BE
(The FEA Approach)

OUTCOMES

•Common, Citizen-focused Performance Measures across agencies and programs

Information Technology
Applications Technology Data

Human Capital
Workforce

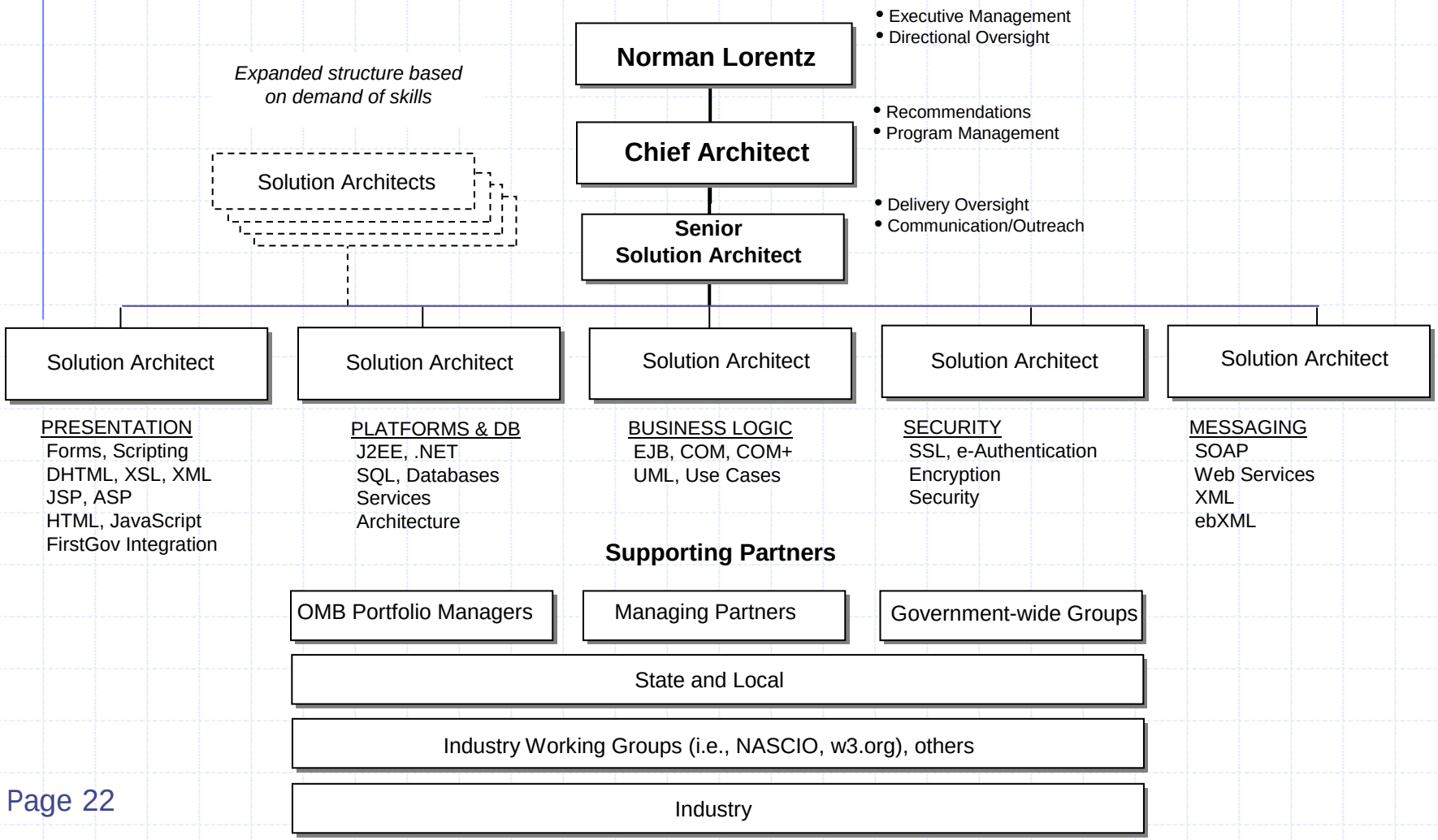
Other Capital Assets
Equipment Fleet Facilities

$$ INPUTS $$

To support the 24 Presidential Priority E-Gov Initiatives, the FEA-PMO created a “solutions” orientated Working Group

- Creation of the Solution Architects Working Group (SAWG)
  - Leadership Team Defined
    - Norman Lorentz – CTO Federal Government
    - Bob Haycock – Chief Solution Architect
    - Solution Architects – Focused on Vertical Tiers of Expertise
  - Mission Objectives
    - Support the 24 Presidential Priority E-Gov Initiatives
    - Provide leadership in areas of solution design and architecture
    - Establish and leverage linkages across Governmentwide entities
    - Generation and dissemination of Intellectual Capital (IC)
    - Risk Mitigation and Transitional Planning
    - Definition and usage of Component-Based Architectures
    - Creation of Component and Service directories

The SAWG Leadership Team consists of solution architects which are focused across vertical areas of expertise



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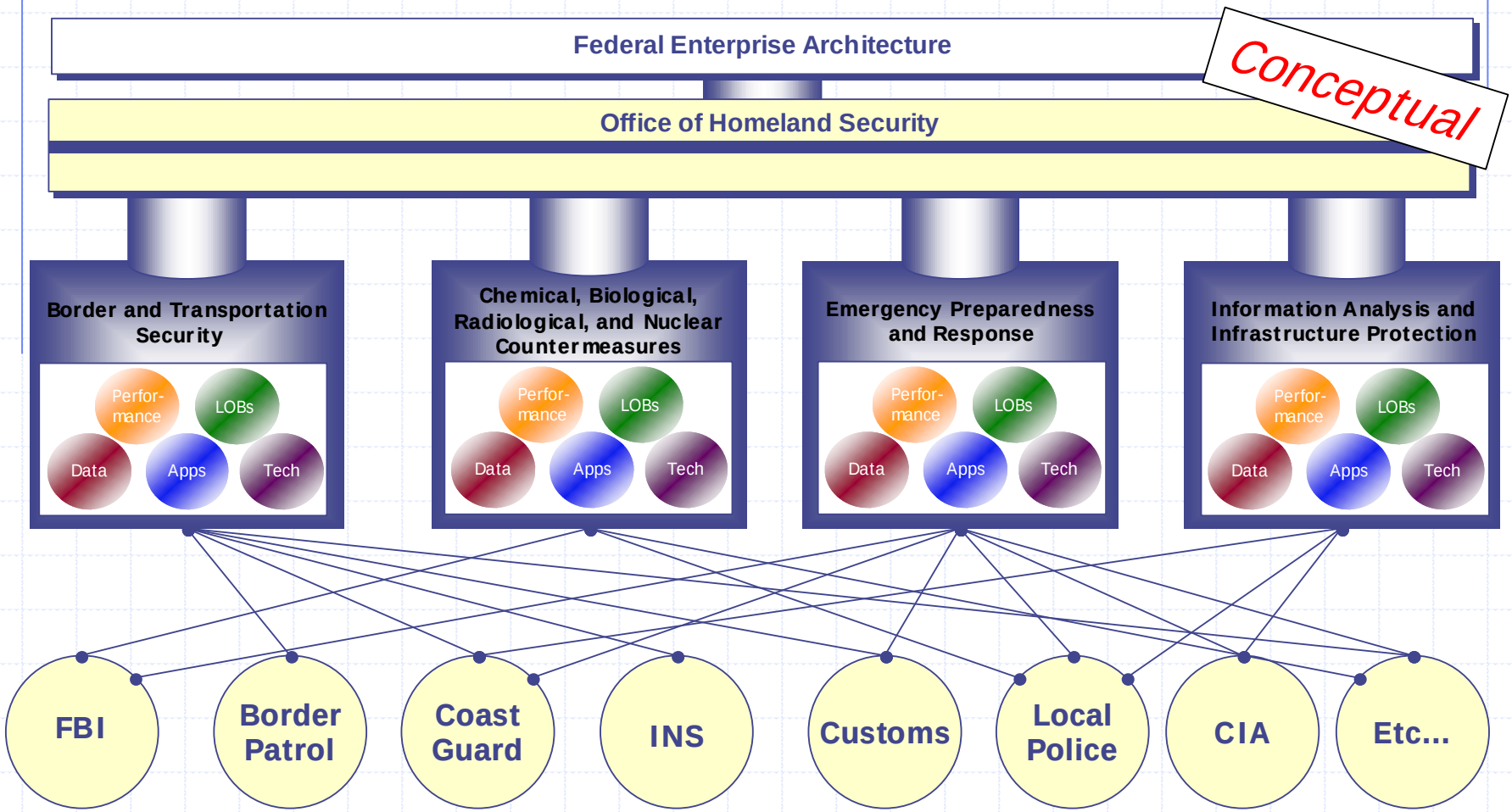
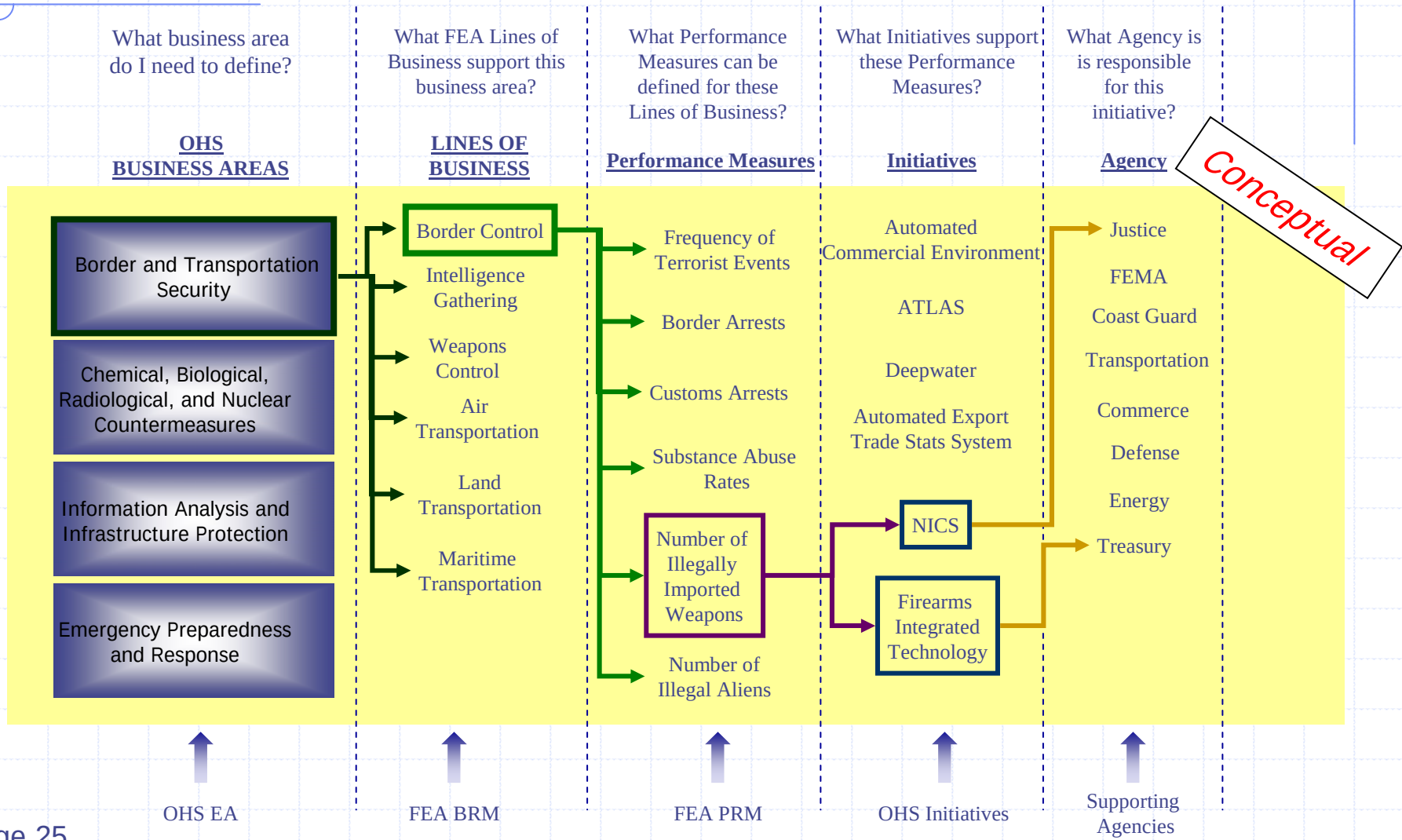
The BRM gives OMB and the Agencies (like OHS) a common framework for defining and implementing a “business line”-driven organization

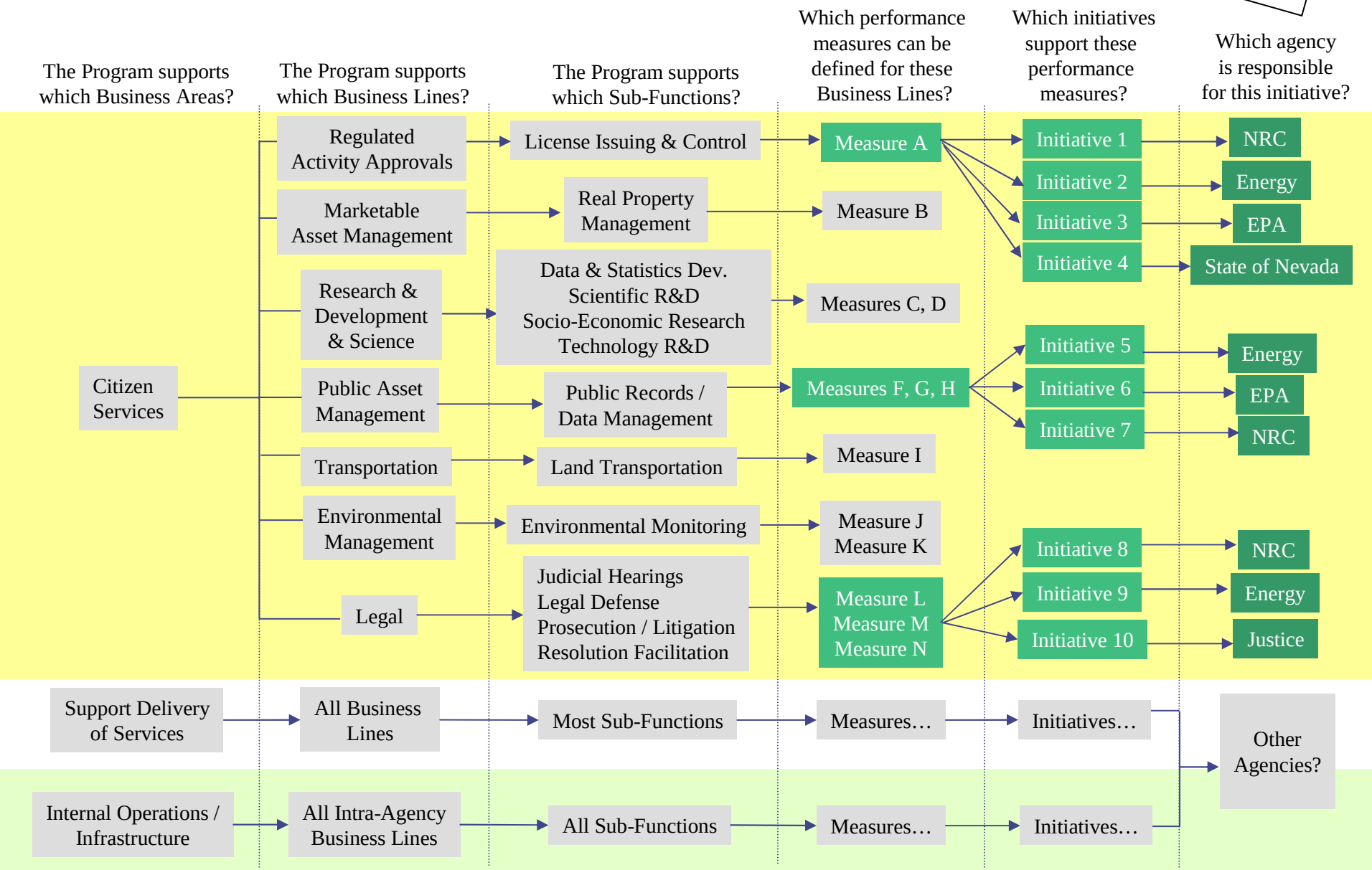


Performance measures and outcomes will be defined for specific Business Lines (as opposed to agencies or programs) facilitating cross-agency, budget/performance integration

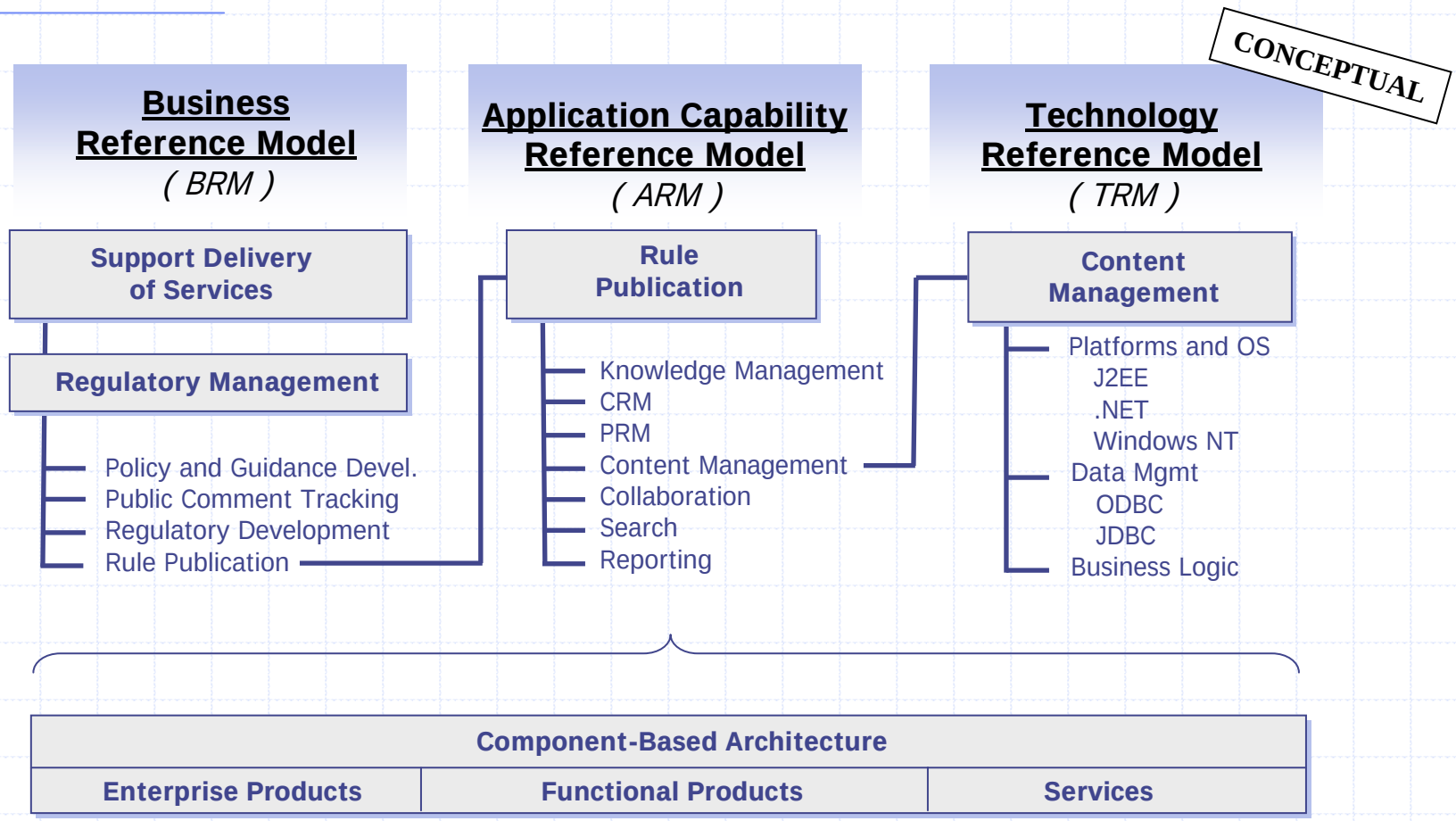


Viewing the Civilian Nuclear Waste Disposal Program through the Federal Enterprise Architecture

CONCEPTUAL



The BRM, when analyzed in unison with the ARM and TRM, provides a foundation for component-based architecture design



The BRM/ARM/TRM approach is providing specific guidance to support the development of the 24 Presidential Priority E-Gov Initiatives

GovBenefits

(Eligibility Assistance Online)

CONCEPTUAL

Federal Enterprise Architecture

Sample List

Business Reference Model (BRM)

Social Services
- Burial Services
- Housing Benefits
- Medical Services
- Monetary Benefits

Application Capability Reference Model (ARM)

- Collaboration
- Data Management
- Commerce
- Search
- Reporting
- Analysis / Logic
- Procurement
- Financial
- CRM
- Human Capital Mgmt
- Logistics
- Content Management

Technology Reference Model (TRM)

- Presentation
- Business Logic
- Data Interchange
- Internet Platforms
- Data Management
- Graphics
- Security

Participating Agencies / Programs

Sample List

150 Federal Benefit Programs

FEMA - Disaster Housing Program
Individual / Family Grants

DOL - Employment Service
WIA Youth Activities

VA - G.I. Bill
Rural Rentals
Beneficiary Travel
Veterans / Survivors

Component-Based Architecture

- Content Management
- FirstGov.Gov
- Business Rules Engine
- CRM
  - User Feedback
  - Demographics
- Data Management

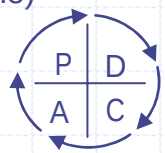
Technologies	Standards, Specifications
JRun Application Server	http://www.java.sun...
Enterprise Java Beans (EJB)	http://www.javasun...
Java Server Pages (JSP)	http://www.java.sun...
Oracle, JDBC	SQL 92

As the objectives of the E-Gov Initiatives expand, transformation benefits will be realized and new cross-agency initiatives may be identified

GovBenefits

(Eligibility Assistance Online)

Plan, Do, Check, Act



Plan, Do, Check, Act

Plan, Do, Check, Act

	Phase 1 Initial Launch	**Phase 2** Online Applications	**Phase 3** Straight-Thru Processing
Citizen	- Single Source For Benefits - Cross-Agency Searching - Consistent Avenues for CRM	- Single Source to Request Benefits - Online Submittals - Automated Error Manager - Benefit Manager / Personalization - Notifications of New Benefits	- Receive benefits quicker - Immediate access to agencies - Increased confidence in services
Agency	- Single Source to Reach Citizens - Demand Forecasting - Business Intelligence	- Single Source to manage apps - Reduce re-submittals of apps - Allocate resources across demand - Launch of new benefit programs - Reach customer quickly - Increase CRM capabilities	- Process benefits faster - Increase quality of services - Realign workforce - Reduce IT overhead - Proactive CRM - Expand customer services - Expand benefit services
FEA	- Alignment of disparate business functions - Specification for interoperability - Identification of components	- Expansion of BRM, ARM - Identification of processes - Reduction of redundancy - Integration with agency EA's	- Expansion of BRM, ARM, TRM - Alignment of processes - Elimination of redundancy - Performance measurements

INTEGRATED PARTNERSHIP

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Next steps for the development of the additional FEA-PMO Reference Models (PRM, ARM, TRM) and the SAWG have also been identified

- Brief agencies on the revised BRM
- Issue FEA Management and Maintenance Plan
- Define and validate the ARM and TRM
- Continue consultations with Dept. of Defense and intelligence agencies to obtain their input on the Business Reference Model
- Work with OMB and Business Line owners from the Federal Agencies to define government-wide and Line of Business-specific performance measures and outcomes (PRM)
- Expand the capabilities of the SAWG by enlisting more Solution Architects
- Assign a Solution Architect to each the 24 Presidential Priority E-Gov Initiatives
- Launch FEAMS on the FEAPMO website